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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,098

06/28/2005

Andrew Homsey

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EXAMINER

AFSHAR, KAMRAN

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

07/09/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com
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Office Action Summary

Application No.

10/541,098

Applicant(s)

HORNSEY, ANDREW

Examiner

Kamran Afshar, 571-272-7796

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 06/28/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 5-6, 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claims 5, 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Regarding Claims 6, 14, are rejected as they are directly or indirectly depended on the rejected claims 5, 13.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Abbadessa (U.S. Patent 6,192,244 B1).

With respect to claims 1, 9, Abbadessa discloses a method of determining frequency planning (See Abbadessa e.g. allocating frequencies is call frequency planning, Co. 6, Lines 45-46), processing / determining the planned neighbor list, control channel frequency or channel number, Co. 3, Lines 65) measurement data in a cellular communications system (See Abbadessa e.g. Co. 1, Lines cellular telecommunications system, Co. 1, Lines 6, Co. 1, Lines 65 – Co. 2, Line 2), comprising: means for allocating / allocating neighbor lists (See Abbadessa BA (SACCH) list of Fig. 3) to provide (See

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Abbadessa e.g. Allocation BA list provided, reporting measurement Result ("MEAS RES"), Co. 5, Lines 59) measurement data (See Abbadessa e.g. DATA Gathering, MEAS RES, measurements the neighboring / neighbouring list information, Co. 10, Lines 62-64, Data from measurement of Table 1 under Co. 11) for frequency planning; wherein the means for / the neighbor lists are allocated (See Abbadessa e.g. measurements based on the BA list / BA (SACCH) list, Co. 9, Lines 31-32) on a per call basis (See Abbadessa e.g. engaged in a call measurements report, Co. 10, Lines 31-32, or measurement is based on list, channel, frequency, carriers, etc. Co. 9, Lines 33-36).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbadessa (U.S. Patent 6,192,244 B1) in View of Silventoinen (U.S. Patent 6,442,387 B1) further in view of Barany (U.S. Patent 6,944,146 B1).

Regarding claims 2, 10, Abbadessa discloses everything as discussed above in rejected claims 1, 9. However, Abbadessa is silent wherein different neighbor lists are allocated by the same base station to different mobile stations for respective calls that overlap in time. In an analogous field of endeavor, Silventoinen discloses a system / a method of Automatic Frequency planning (AFP) (See Silventoinen e.g. Co. 1, Lines 50-51). Further, Silventoinen makes it obvious the concept that different neighbor lists are allocated by the same base station to different mobile stations (See base station 106, alter measuring list, MS 112, 114, Co. 2, Lines 60-63). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Silventoinen to Abbadessa to provide a system / a method of Automatic Frequency planning (AFP) (See Silventoinen e.g. Co. 1, Lines 50-51) assigning or allocating different list to different mobile terminal (See Silventoinen e.g. Co. 1, Lines 50-51, Co. 2, Lines 60-63) so that a desired frequency channels easily provide sufficient information for the

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needs of the frequency planning. The gathering and transmission of information occurs smoothly without disturbing the normal telephone traffic as suggested (See Silventoinen e.g. Co. 1, Line 67 – Co. 2, Lines 4). In an analogous field of endeavor, Barany discloses overlap in time (See Barany e.g. Co. 7, Lines 32-33). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Barany to Silventoinen and Abbadessa to provide an effective channel-reuse pattern that is based on both frequencies and time as suggested (See Barany e.g. Co. 7, Lines 36-37).

8. Claims 3-4, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbadessa (U.S. Patent 6,192,244 B1) in View of Silventoinen (U.S. Patent 6,442,387 B1) further in view of Stegemann (U.S. Patent 6, 928, 286 B2).

Regarding claims 3-4, 11-12, Abbadessa discloses everything as discussed above in rejected claims 1, 9. However, Abbadessa is silent that a different neighbor list is allocated for each call / of a predetermined number of calls conducted by a base station of the cellular communication system, compared to respective / predetermined number of directly preceding calls. In an analogous field of endeavor, Silventoinen discloses a system / a method of Automatic Frequency planning (AFP) (See Silventoinen e.g. Co. 1, Lines 50-51). Further, Silventoinen makes it obvious the concept that different neighbor lists (See base station 106, alter measuring list, MS 112, 114, Co. 2, Lines 60-63) are allocated for each call / of a predetermined number of calls (See Silventoinen e.g. calls, channels, or frequencies f1-f3, or frequency list, Co. 2, Lines 65-67) conducted by a base station (See Silventoinen e.g. frequencies f1-f3 and / or f4-f5, Co. Co. 3, Lines 4-8) of the cellular communications system (See Silventoinen e.g. cellular radio system of Fig. 1, Co. 2, Lines 23-24) and comparing (See Silventoinen e.g. Co. 4, Lines 4-7). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Silventoinen to Abbadessa to provide a system / a method of Automatic Frequency planning (AFP) (See Silventoinen e.g. Co. 1, Lines 50-51) assigning or allocating different list to different mobile terminal (See Silventoinen e.g. Co. 1, Lines 50-51, Co. 2, Lines 60-63) so that a desired frequency channels easily provide sufficient information for the needs of the frequency planning. The gathering and transmission of information occurs smoothly without disturbing the normal telephone traffic as suggested (See Silventoinen e.g. Co. 1, Line 67 – Co. 2, Lines 4). In an analogous

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field of endeavor, Stegemann teaches compared to respective or the predetermined number of directly preceding calls (See Stegemann e.g. the frequency or channel list, each channel is determined based on the immediately preceding channel, Co. 3, Lines 1-5). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Stegemann to Silventoinen and Abbadessa to provide different frequency planning algorithms, in which each channel (call) is determined on the basis of the immediately preceding channel (or call) as suggested by (See Stegemann e.g. Co. 3, Lines 1-5).

Claim Rejections - 35 USC § 103

9. Claims 5-6, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbadessa (U.S. Patent 6,192,244 B1) in View of Admitted Prior Art (APA).

Regarding claims 3-4, 11-12, Abbadessa discloses everything as discussed above in rejected claims 1, 9. Abbadessa discloses the neighbor lists are allocated (See Abbadessa e.g. measurements based on the BA list / BA (SACCH) list, Co. 9, Lines 31-32) on a per call basis such as to cover, over a plurality of calls (See Abbadessa e.g. engaged in a call measurements report, Co. 10, Lines 31-32, or measurement is based on list, channel, frequency, carriers, etc. Co. 9, Lines 33-36). However, Abbadessa is silent substantially all test frequencies for the cell served by the base station and / or repeating, on a cyclical basis comprising repeated pluralities of calls. In an analogous field of endeavor, The APA makes it obvious the concept of substantially all test frequencies for the cell served by the base station (See APA e.g. test frequencies, Page 1, Lines 8-11 of [0006], all the frequency is tested, Page 1, ¶ [0007] and / or repeating, on a cyclical basis comprising repeated pluralities of calls (See APA e.g. once a day over the course of number of days, Page 1, ¶ [0007])). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of APA to Abbadessa to provide an efficient usage of resources and service to large numbers of users, practically for employing a frequency plans that may involve potential interference; using various methods are known for testing systems to acquire data to enable frequency plans to be improved as suggested (See APA, Page 1, Lines 1-6 of [0004]).

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Grandhi (U.S. 5, 828, 963 A).

b) Magnusson (U.S. 6, 285,874 B1).

c) Ngan (U.S. 6, 973, 312 B1).

d) Wallstedt (U.S. 5,854,981 A).

e) Celedon (U.S. 7, 050, 803 B2).

f) Desgagne (U.S. 6, 175, 734 B1).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Eng, George** can be reached @ (571) 272-3984. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner


Kamran Afshar